1: Turnbull E-4. 5 (1951-1955) 1965 FO4 Pygmies FO4
Mbuti

[P. 164-C]

that the caterpillar turns into a butterfly." 000

The forest throughout is interlaced with 133
rivers and streams, and the terrain is gently un- 182
dulating. These rivers, and the larger of the [166]
streams, seem to form effective natural bound- [823]
aries and may well influence migratory ten- [484]
dencies, as the Pygmy both dislikes large ex-
panses of water and lacks the knowledge of how
to bridge them. Reports of journalists and [491]
others of Pygmy bridge-building activities [179]
(Cotlow, 1956) probably result from recent
attempts, by both villagers and European
movie makers, to teach the Pygmies how to
build swing bridges. Putnam (1948, 325) asserts
that the Pygmy probably never has to go more
than 100 yards to find water. Temperatures 132
throughout the year vary only between a low of
70° F. at night and a possible high of 80° F.
during the day. The forest varies with respect 137
to underbrush but on the whole is unimpeded
virgin growth, with a carpet of leaf mold be-
tween the trees. Where villagers have made a
clearing, however, there is thickly tangled
undergrowth.

2: Turnbull E-5 (1951-1958) 1965 FO4 Pygmies FO4
Mbuti

clearly defined, opening northward into a large central area unclaimed by anyone.

The topography of the Epulu territory is similar to that of most other bands, though without the steep, mountainous ridges that occur slightly further east. The ground is gently undulating, as thickly forested on the hilltops as in the valleys, though the vegetation is much denser along the banks of streams and rivers. It is almost impossible to walk more than a few hundred yards without having to cross a small stream, and after a particularly violent and prolonged rainfall there are areas that become temporarily flooded and the larger streams may become uncrossable torrents. But normally there is little difficulty in traveling from one extreme of the area to another. There are no swamps, the ground is clear of the tangled undergrowth that characterizes old plantation sites, and all but the largest streams are either shallow enough, in places, to be forded or are bridged at intervals by fallen trees. Nowhere do the Mbuti need to build bridges, and nowhere do they do so except in the village context.[2] It is a simple fact that rivers that are too wide to be bridged by a fallen tree are relatively far and few between, and therefore form convenient natural boundaries. There is neither the desire nor the need to cross such rivers. A certain mistrust of large bodies of water strengthens the efficacy of rivers as boundaries, just as the few superstitions to be found among the Mbuti mostly relate to ravines, caves, streams or hills that form other boundaries.

The abundance of game and vegetable food may be taken for

[2] The famous "pygmy" bridge and the spectacular technique of crossing a river by swinging on a vine from one side to the other were taught to the Mbuti, not without difficulty, by an enterprising movie-maker. Patrick Putnam was asked to assist as interpreter, but refused. His first wife, however, went to watch the proceedings. The same group of pygmies retained some knowledge of the technique, and obligingly repeated the act for subsequent "documentary" film units. They are the only group with the knowledge, though they are now less proficient. A more recent movie-maker had to sling a wire hawser across the river and suspend the vine swing from its midpoint. A simple mathematical calculation will reveal the impossibility of the swinging technique, even disregarding the area behind the swing that would have to be cleared, a task in itself beyond Mbuti technology. Assuming the fulcrum is over one bank, and the branches into which the pygmy is to swing are directly over the far bank (a generous assumption), and assuming that the pygmy can be drawn back far enough to swing up to a 45-degree angle at the far end of his swing, the maximum width that can be crossed is three-quarters of the height of the swing. In practical experiment among the Mbuti, I found that effectively half the height of the swing was the maximum horizontal distance that could be so traversed. This would mean that to cross a river a mere hundred yards in width, the fulcrum would have to be some 600 feet up, demanding a tree approaching the height of the Eiffel Tower. Conversely, a swing of the maximum normally practicable length of 60 feet would enable a pygmy to span a stream a mere 30 feet across. Pygmies generally have rather more sense, in such matters, than movie-makers.

3: Turnbull E-5 (1951-1958) 1962 FO4 Pygmies FO4
Mbuti
Congo-Kinshasa FO1

had one of our most fruitful treks of all, learning many new and important things about the forest people.

The terrain was very different from that of Epulu, being mountainous and rocky, with jagged boulders sticking out of the ground at crazy angles as though some great city had once been swallowed by an earthquake. But even on the steepest escarpments, where the huge trees seemed to grow out of the very rocks, the Pygmies moved as quickly and surely and silently as elsewhere. For the first time I saw Kenge in difficulty, he being as unused to this kind of mountaineering as I was. But we were anxious to press inward as far as we could, and once again we found ourselves almost back at the Epulu; it lay about two days to the southwest at most.

While we were in this part of the forest we heard many stories of the old wars between the various tribes of villagers, as they invaded the forest, and how the Pygmies got caught between them so that they were forced to side with one group or another.

On leaving Nduye we continued southward, past the administrative center of Mambasa, and when we had crossed the Ituri, which at this higher point was, in Kenge's words, "a mere child," we once more left the car and began walking. At the end of a day, having passed through three deserted Pygmy villages, we were beginning to feel dubious at the wisdom of having come so far without a guide when we came to the banks of a large tributary of the Ituri. There, to our mutual surprise, was one of the legendary vine bridges, slung high up over the swirling waters, suspended by lianas fastened to the topmost branches of the trees on either bank. I was glad that Kenge was amazed, because there is every reason to believe that these bridges, contrary to the information supplied by romantically minded movie-makers, are not of Pygmy origin. To cross the bridge we climbed up a series of logs leading to a fork in the tree to which our end of the bridge was anchored, and from there we made our swaying way across. Kenge refused to look down, and when I stopped in the

3: Turnbull E-5 (1951-1958) 1962 FO4 Pygmies FO4
Mbuti

middle to get a better view of the way the supporting lianas were fastened, he urged me on, saying that it was not natural to be standing there in the middle of the air over a dangerous river.

On the far side we came to a camp, and there we found some relatives of the Epulu Pygmies, including one girl who was well known to us both—Makubasi's first wife.

We stayed there for the night and then moved on up a trail that led to the Protestant mission of Biasiku. This was headed by an American misionary, the Reverend Charles Bell, and his wife. They had been in the Ituri for about as long as Father Longo and Pat Putnam had. As soon as they heard that we were staying in the camp down by the river they made arrangements for us to stay at the mission, and without knowing that we were on our way Mr. Bell set out on foot to issue the invitation in person. I had a special reason for accepting it; I wanted Kenge to have a fair notion of the way different missions operated. I certainly had no desire to see him converted, but having given him a taste of missions it seemed fair that he should have an all-round picture, and earlier during our trip we had had an unfortunate experience with a different Protestant mission.

At that mission prayers were said in public about five times a day, mention always being made of any converts who might be ill, however slightly. Prayers were also made requesting the Almighty to provide a road into the forest so that the mission could have easier access to the Pygmies, and thanks were offered for a new automobile that had been acquired. All this was perfectly understandable to the villagers, with their own tradition of witchcraft. They merely thought this a particularly powerful form of magic. Kenge was skeptical. "How is their god going to put a road into the forest when the white man can't do it?" he asked.

But one day, while we were there, a wounded Pygmy was brought in. He had been gored while hunting and was groaning with pain.